

Available online at www.sciencedirect.com**ScienceDirect**

Procedia - Social and Behavioral Sciences 174 (2015) 3832 – 3837

Procedia
Social and Behavioral Sciences

INTE 2014

Tradition of notation in the history of Turkish Music

Cemal Karabaşoğlu^{a,*}^aUniversity of Sakarya, State Conservatory, Department of Basic Sciences, Esentepe Campus, Serdivan, Sakarya, 54187, Turkey

Abstract

Notation which is expressing of writing musical tones by using some type of special signs has changed into the many phases up to now which is widely used. Although different knowledge placed at the different sources about when and where the musical writings were came into existence. Notation in the tradition of Ottoman music era had become widespread from the beginning of 19th century. Within the traditional musical understanding as a method of education and transference, Notation was used mostly in the edvar books especially for explaining of theory of music. In opposition to implementation of traditional educational method (meşk), the books written for saving repertoire are the most important historical music resources from centuries they belong. It has a vital necessity for the musical observations and researches on recognizing and learning of different notations used in the history and reading the most important notation heritage of Turkish Music.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Sakarya University

Keywords: Turkish Music; Musical Writing; Notation; Ebced; Hamparsum

1. Introduction

Notation is the most important document in the musical studying and searching areas and its importance still continue even the sounds could be recorded nowadays. Also its priority in the old eras is indisputable. Especially it has a vital necessity for the researchers to recognize and learn the special types of notations used in the history of Turkish Music.

Many type of musical writings had been improved in the different ages and cultures to write the musical sounds by using some special signs. Although there is different knowledge in many resources about when and where the first musical writing was to came out, mainly accepted approach in the science of history that the Sumerians had

* Cemal Karabaşoğlu. Tel.: +905357682707; fax: +90 2642956552
E-mail address: cemalk@sakarya.edu.tr

succeeded to write their music about 2000 (B.C); such as Phoenicians, Babylonians, old Egyptians, Hebrews, Ethiopians and other Semitic societies had generated musical writings; likewise Uyghur, Chinese and Indians also had presented their musical writings about first years of the birth date of Christ; ancient Greeks and Romans also had improved different kind of musical writings about 5th century before D.C.(Agayeva, 2007)

In the mean time meşk method used for the traditional education and transference of Turkish Music, notation is mostly utilized in the edvâr books which explain theoretical systems. In opposition to implementation of meşk – traditional educational method– the books written for saving repertoire are the most important historical music resources from centuries they belong. Because of many cases especially incapacity of human memory and remembrance, getting harder and increase of the number of compositions, inadequate of the meşk method, to be forgotten of the compositions, potential of repeating and the necessity of teaching to others made the musical determining and writing needed. Different notation experimentations faced in the history of Turkish Music can be classified as follows.

2. Notation Experimentations Based on the Letters

These notation systems mainly based on expressing every sound by using letters. All letters focused musical writings that sometimes Arabic letters or different letters derived from another alphabet are encoded in a special serialization can be classified under this title.

3. Musical Writings Developed by Using Ebced Serialization

In the 9th century beginning from el-Kindî, after instantly him Safiyyüddin Urmevî, Kutbeddîn Şîrâzî and Abdulkâdir Merâgî used ebced letters for explain and show the notes in edvâr books written about the characteristic of music is called as “notation of ebced” in the contemporary Turkish Music literature. (Ayangil, 2014) In these types of musical writings theorists used letter notation according to the ebced serialization for theoretical system explanations instead of playing music.(Bardakçı,1986) Each letter or letter group corresponds to a note. Length of the notes is generally showed by the numbers below. The method for determining the notes if carefully surveyed, it is clearly noticed that the system is composed of the sounds existed before and the sounds are not generated from an existed system.

Differing from contemporary Turkish Music theory there is not big and little type of mücennep interval. This mücennep interval is used to show both types. So interval of mücennep should be thought as both types. Transference of the musical writings are not implemented correctly because of the note scales in the most of ebced system are not indicated. Especially there is a disagreement about the first note letter “elif” shows which tune at the present. Elif generally accepted as the tune of sol in the western music although there is no la tune of steady diapason which prevents certain estimation.

Musical writing is only used in the traditional theory books called edvâr for explaining intervals, makams, tuning of instruments and partly methods of composing by melodic examples. But using the notation for recording the repertoire and transferring it to the next generation, or saving the masterpieces of composers is never became wide. Some theorist of Turkish Music such as el-Fârâbî (d.950), İbn Sînâ (d.1037), Safiyyüddîn Urmevî (d.1294), Abdülkâdir Merâgî (d.1435), Kutbunnâyî Osman Dede (d.1730), Abdülbâkî Nâsır Dede (d.1821) used different types of ebced notation systems in their theoretical explanations. The consideration of “*Arabic ebced notation was unknown by the musicians and performers or never used by them; but it was certainly belonging to scientist and philosophers.*” (Öztuna, 1974) is a fact that should be evaluated according to the theory and performing sense of the centuries that the books were written.

3.1. el-Kindî (d. 874)

Although there is no certain evidence about the derivation of ebced notation, some of the oldest examples were encountered in the books of el-Kindî. In the 9th century he used Arabic letters to indicate the tunes in a special systemizing. Being specialist in different kind of sciences, el-Kindî had wrote ten books in music including subjects like combination of tunes, methods of composition, components of music, rhythms, instruments, relation between music and poetry. Four of his books *Risâle fi Hubr-i Sinâ'ati't-Te'lif* (The book on composition), *Kitâbu'l-Musavvâtî'l-Veteriyye min Zâti'l- Veteri'l-Vâhid ilâ Zâti'l-Aşreti'l-Evtâr* (The book on instruments), *Risâle fi'l-*

Luhûn ve'n-Nağâm (The book on components of music), *Risâle fi Eczâ Hubriyye fi'l-Mûsika* (The book on tunes and melodies) has reached to the present. Subsequently by the translation of his books from Arabic to Latin, he became famed honorably in the Western world. (Turabi, 1996) After the translation works of Beytû'l-hikme, he is thought to be drawn inspiration from oldest musical writing method and developed a new notation system using the Arabic letters. In this system he used twelve Arabic letters in a chromatic scale. Variously from Greek notation, he used same letters in every scale and never indicated the octave differences. His theorist predecessors also preferred to utilize this notation system sometimes the same or by little changes.

3.2. *el-Fârâbî (d.950)*

One of the famous philosophers in 10th century Abu'n-Nasr el-Fârâbî is accepted as “muallim-i sânî” second teacher of philosophy. He is also accepted as “muallim-i evvel” first teacher of music by the most of the theorist and Turkish musical historian. (Jebrini, 1995) Especially he confirmed his fame by his theory book of *Kitâbü'l-mûsikâ'l-kebîr* which is accepted as the most important writing on eastern musical theory and the most comprehensive one. In his work he exceeded old Greek theorist by his studying method on explanations on physical and physiological principles of music. Additionally it includes a lot of organology knowledge raising its importance. (Farmer) His other books on music are known by the name of *Kitâbu İhsâ'i'l-ikâ'ât* and *Kitâbun fi'l-ikâ'ât* which are mainly including his explanations on rhythmic structures in music. In his musical writing system el-Fârâbî, indicates scales and octaves according to the letters' series and the system is mainly focused on showing the key position on instrument instead of showing the tunes and melodies. Different kind of Fârâbî's musical writings in some European libraries are published by Henry George Farmer with briefly translation in to English in the name of *al-Fârâbî's Arabic-Latin Writings On Music*. (Jebrini, 1995)

3.3. *İbn Sînâ (d.1037)*

Being authorized in many kind of science like medicine, logic, philosophy, physics, botany and psychology, İbn Sînâ (Özcan, 2001) accepted music as a mathematical science and gave place his musical understanding in his two books of *eş-Şifâ'* and *en-Necât*. (Turabi, 1999) His scientific standing in music, not only his time but also later were a center of attention. Also the thoughts he suggested in his books guided to musical theorist during the centuries. (Turabi, 1997) Although he didn't write an individual book on theory of music, he clarified his considerations in the music chapters of *eş-Şifâ'* and *en-Necât* where the influence of el-Fârâbî obviously can be seen. (Özcan, 2001)

3.4. *Safiyüddîn el-Urmevî (ö.1294)*

The most detailed ebced notation system based on Arabic letters is explained by Safiyüddîn el-Urmevî. His notation system analyzed and examined by the predecessors of him and gave them his musical understanding at that period. His famous two musical theory books *er-Risâletü's-şerefiyye fi Nisebi'te'lifîyye* and *Kitâbü'l-edvâr fi Ma'rifeti'n-negam ve'l-evtâr* – briefly known as *Kitâbü'l-Edvâr*– were the main resources of his theorist followers. His theoretical approach based on 17 scale in one octave which is standing up to now. Only one of his compositions, which he wrote by using ebced notation in makam nevrûz and rhythmic structure of remel with Arabic words, fortunately has reached to now. This composition is also accepted the first oldest example of beste form in the Turkish musical history. (Özcan, 2001)

3.5. *Abdülkâdir Merâgî (ö.1435)*

It is easy to say that in the tradition of Islamic Middle East before modern music era never a composition is saved in notation by reason of auditorial transition. At that time the most authentic way of repertoire saving was to write word of songs which are serving as a substantial message without including any melodic definitions in the anthologies. (Wright, 1994) In this way there are about forty three songs words in many different anthologies attributed to Abdülkâdir. (Kent, 1995) Nearly thirty notes with repeated ones from his compositions came up to now. Additionally, belonging of these songs to him is uncertain because of the possibility of changes during the centuries and using the meşk method for transference.

Merâgî accorded six different books on musical theory. Although they seem the same, his six books are completing each other. (Shiloah, 1979; D'erlanger, 1949) Content of *Şerh-i Kitâbu'l-edvâr* is a detailed explanation of theoretical

system of Safiyyüddin. Other book of him, *Makâsîd'l-elhân* is including brief explanation of his musical theory. In some subjects for detailed explanations he is also referring to his other books *Câmiu'l-elhân* and *Risâle-i Fevâid-i Aşere*. This is an evidence of his six books are not the same, but his books written by a gradational method on explanation some subjects. His other book *Kenzü'l-elhân*, generally to be thought that holding his compositions written by his ebced system notation, is never found up to now. (Bardakçı, 1986) One of the most famous Turkish music theorist of the 20th century, Hüseyin Sadettin Arel (d.1955) in his book of *Türk Mûsikîsi Kimindir* claimed that Merâgî in his books declared that *Kenzü'l-elhân* full of notes of his compositions (Arel,1969) which can't be reached by the present music researchers. Either in *Câmiu'l-elhân* or *Makâsîd'l-elhân* his references to *Kenzü'l-elhân* proved that it is written earlier than others and mainly including detailed theoretical subjects conversely general opinion. (Karabaşoğlu, 2010)

In the 15th century and earlier the Turkish music system was based on 17 intervals in one octave. Generally one octave divided to 17 unequal intervals and by this way 18 tunes obtained. This 17 intervals system belongs to Safiyyüddin. Later him it is improved by some theorist like Kutbeddin Şîrâzî (d.1311), Muhammed B. Mahmud el-Âmulî (14th century) and Mehmed Lâdikî. Merâgî is also one of the biggest contributor of this theory and musical system. (Bardakçı, 1986) Here the tunes in the system of Merâgî are given in the table 1. (Karabaşoğlu, 2010)

Table 1. The table of division of two octave in the 17 intervals in the system of Merâgî

Column A (tune names and letters of 1rst octave)		Column B (letters of 2rst octave and tune names)	
Râst	A (ا)	YH (ح)	Gerdâniye
Şûrî	B (ب)	YT (ط)	Nim Şehnâz
Zengûle	C (ج)	K (ك)	Şehnâz
Dügâh	D (د)	KA (گ)	Muhayyer
Kürdî	h (ه)	KB (ك ب)	Sünbûle
Segâh	V (و)	KC (ك ج)	Tiz Segâh
Bûselik	Z (ز)	KD (ك د)	Tiz Bûselik
Çârgâh	H (ح)	Kh (خ)	Tiz Çârgâh
Sabâ	T (ط)	KV (ك و)	Tiz Sabâ
Uzzâl	Y (ي)	KZ (ك ز)	Tiz Uzzâl
Nevâ	YA (يا)	KH (ك ح)	Tiz Nevâ
Beyâtî	YB (ي ب)	KT (ك ط)	Tiz Beyâtî
Hisâr	YC (ي ج)	L (ل)	Tiz Hisâr
Hüseynî	YD (ي د)	LA (لا)	Tiz Hüseynî
Acem	Yh (ي ه)	LB (ل ب)	Tiz Acem
Evc	YV (ي و)	LC (ل ج)	Tiz Evc
Mâhur	YZ (ي ز)	LD (ل د)	Tiz Mâhur
Gerdâniye	YH (ي ح)	Lh (ل ه)	Tiz Gerdâniye

3.6. Kutbunnâyî Osman Dede (d.1729)

One of the different varieties of ebced notation inventor in the 18th century was Kutbunnâyî Osman Dede, composer and theorist of Turkish Music. In the *Sâlim Tezkiresi* is mentioned that Osman Dede was able to use ebced notation skillfully in these lines: “...*Kelimât ve hurûf kitâbet eder gibi nağme ve savtı kitâbet ederdi. Zîr u bâm ve tîz ü pest şîve-i harekâtı idâre-yi mahsûs üzere yazıp bir vech ile zapt ederdi kim...*” –He could write notes and melodies as if write words and sentences. He could also wrote dawn shrill and heavy sounds by using special signs. (Karabaşoğlu, 2012) – His edvâr book which is including information on his notation and some examples unfortunately didn't reached up to now. From different resources as we know the edvâr book of Osman Dede was including about seventy instrumental notation of his compositions which most of them also repeated in the books of Cantemir and Kevserî. (Judets, 1998)

3.7. Abdülbâkî Nâsır Dede (d.1821)

One of the most remarkable suggestions of ebced notation was invented by Abdülbâkî Nâsır Dede, a Mevlevi theorist and one of the shining composer of 19th century. While he focused on theoretical subject in *Tedkik u Tahkik*, in his other book of *Tahrîriyye* he explained details of his ebced notation and wrote down four of his own compositions by using this notation.

4. Other Musical Writings Developed by Using Letter Serialization

4.1. Dimitrie Cantemir (d.1723)

As being a theorist and a composer Cantemir lived in the same period of time with Kutbunnâyî Osman Dede. Because of education he came to Istanbul in his early ages. His teacher in music and instrument was Tanburî Angeli. His book with the name of *Kitâb-ı 'İlmü'l-mûsikî 'alâ Vechi'l-hurûfât* was including knowledge on Turkish Music theory and the notation examples of musical forms played at that period. This book also was presented to II.Ahmed, sultan of the era. By his book Cantemir tried to collect disorderly musical knowledges and methods in a systematic base. Additionally his book also was including three hundred and fifty one note examples of instrumental form like *peşrev* and *semâî*. Beside including many different notes which belong to 16th and 17th centuries, his work can be accepted as a characteristic book of basic Turkish Musical theory, also an anthology of instrumental compositions, education of solfeggio, instrument (method of playing tanbur) and a book of musical forms. (Tura, 2001; Ayangil, 2014)

Differing from classical ebced serialization in his system durations of the notes indicate by putting little numbers upside of letter or sometimes below. Cantemir followed ebced system partly and he indicated tunes with using letters –Arabic letters but not in ebced serialization– and the measurements with numbers.

The most important characteristic which differs his system from ebced is his specify the letters reminding of the tune names. “ *Bu yüzden, Kantemiroğlu notasını ‘bir çeşit ebced notası’ diye adlandırmak yanlıştır, onun notası bir ‘harf’ yada ‘kısaltılmış perde adları’ notasıdır.*” –For this reason classifying his notation system as a kind of ebced notation is wrong, because it is a type of letter or reduced names of tunes.– (Tura, 2001)

Nearly fifty years later after Cantemir, Nâyî Ali Mustafa Kevserî had copied his book. He also added in his edition about fifty new notes that he wrote following the Cantemir’s writing system.(Judetz: 1998) This copied edition known as *Kevserî Mecmuası* and it can be an evidence that Cantemir’s writing system had been used temporally to protect musical savings.

4.2.Hamparsum Limonciyan (d. 1839)

In the first quarter of 19th century by encouragement of the Ottoman Sultan III.Selim, Hamparsum Limonciyan managed to invent a kind of musical writing method which is called by his own name “Hamparsum Notası”. Although it has not enough sufficiency to indicate whole tunes in Turkish Music, because of its practical specialties like no necessity for stave, easiness to write and learn it was widely used before today’s notation. There are seven sign for seven main tune. Shrill octave tunes are indicated by using short line under the these seven main tune. There is no alteration or special signs for makams, these are determined depending on makam using and performing. The measurement of the tunes are also indicated by using little lines and circles on the tune signs. Notation of Hamparsum is the most reliable and extensive musical writings used in the history of Turkish Music.

5. Musical Writing Trials for Graphical Notes

There are different note trials instead of writing with ebced lining or letter coding in Turkish musical history. Within these, the techniques developed by Ali Ufkî Bey provided notation of much more songs comparing with ebced system. The graphical western notes started to be used with the help of the teachers coming from abroad to make lessons for the students of Muzıka-yı Hümâyûn established to replace with Muzıka-yı Hümâyûn in the term of Sultân II. Mahmud.

5.1. Ali Ufkî Bey

One of the major sources of Turkish music in 17th century is *Mecmûa-i Sâz ü Söz* which is copyright by Ali Ufkî Bey. This is the first book used in Turkish music history for note writing in western style with stave. He reflects us his musical understanding by recording the songs in forms of species in Turkish music in a style developed by him. “Note of Ali Ufkî is same as the stave note composed of five lines used in west. Alterations and signs are used in status in west. No extra mark was added to show the tunes in Turkish music and no explanation took place indicating tunes and interval in Turkish music.” (Karamahmutoğlu, 2014) The famous copyright of Ali Ufkî including more than 500 songs in all species and forms prevented loss of these songs.

5.2. Dârülelhân

The use of graphical notes of western style in Turkish music appeared as in the nature given in Dârülelhân. Writing style stave in here were written in western note style but the words were as syllables from left to right as opposite of writing style in Ottoman Turkish. The lack in showing the alterations in this system was tried to be removed especially by the studies of Hüseyin Sadettin Arel and Suphi Ezgi and then the system used in Turkish music today was composed. Notes on stave stood in line with direction of word writing because of the writing style from right to left in Ottoman Turkish. Writing of western notes used by Dârülelhân in 20th century was from left to right but the words were aligned across the writing direction as syllables.

6. Conclusion

Today, not widely use of notes in Turkish musical history brings criticism about not having notes in Turkish music or loosing compositions because of not having notes. On the other hand, the reasons for choosing meşk by a music culture, which is a conservation and transition method in verbal culture, should be investigated in detail. The real reason for widely use of notes can be interpreted in a health manner.

Especially note systems in edvâr books were created for teaching and remembering their performers the voice structure of the term that the notes were constituted and showing the right intervals by mathematical methods to the performers. So, it was not in a style that makes a system or rules to an existing music but developed for only explaining the existing music by not affecting the evolution of the music.

Transfer of collections composed of note writings that were developed in Turkish musical history in different libraries to today's notes provides us understanding the musical style in different terms in Turkish musical history in addition to appearance of most of the songs that are thought be lost.

References

- Agayeva, S. (2007). Nota. *Diyanet İslam Ansiklopedisi*, v.33, 206.
- Arel, H. S. (1969). *Türk Müsikisi Kimidir*, İstanbul: Milli Eğitim Bakanlığı Pub, 87.
- Ayangil, R. (2014). XVII.yüzyılda Türk Musikisi. *Yeni Türkiye*, Ankara, v.57, 472, 476.
- Bardakçı, M. (1986). *Maragalı Abdülkadir*, İstanbul: Pan Pub, 53, 129, 148-149.
- D'éranger, R. (1949). *La Musique Arabe*, Paris, 398.
- Farmer, H. G. Müsikî. *İslam Ansiklopedisi*, İstanbul, v.XIII, 681.
- Jebrini, A. (1995). Fârâbî. *Diyanet İslam Ansiklopedisi*, İstanbul, v. XII, 162.
- Judetz, E. P. (1998). *XVIII.Yüzyıl Musiki Yazmalarından Kevseri Mecmuası Üstüne Karşılaştırmalı Bir İnceleme* (çev. haz. Bülent Aksoy), İstanbul: Pan Pub, 37-38; (1998), *Türk Musikisi Kültürünün Anlamları* (çev. Bülent Aksoy), İstanbul: Pan Pub, 18.
- Karabaşoğlu, C. (2010). *Abdülkâdir-i Merâğî'nin Makâsıdu'l-elhân Adlı Eseri*, İstanbul, 27-28, 48; (2012), *Lâle Devri Müsikişinâsları*, İstanbul: Kutup Yıldızı Pub, 111-112.
- Karamahmutoğlu, G. (2014). Türk Müziğinde Kullanılan Notalama Sistemleri, *Yeni Türkiye*, Ankara, v.57, 765-766.
- Kent, S. (1995). *Abdülkâdir-i Merâğî Hayâtı Ve Eserleri'nin Usul ve Gıfte Yönünden incelenmesi*, İstanbul, 16-18.
- Nuri Ö. (2001). *Müsikî Ders Notları*, 9-11; (1993). Dârülelhân, *Diyanet İslam Ansiklopedisi*, v. 8, İstanbul.
- Öztuna, Y. (1974). *Türk Müsikisi Ansiklopedisi*, v.2, İstanbul: Milli Eğitim Pub, 96-99.
- Shiloah, A. (1979). *The Theory Of Music İn Arabic Writings (c.900-1900) Descriptive Catalogue of Manuscripts in Libraries of Europe And The U.S.A*, München, 171-172.
- Tura, Y. (2001). *Kitâbu 'İlmi'l-Müsikî 'alâ vechi'l-hurûfât*, İstanbul: Yapı Kredi Pub, XXVII – XXXVI, XLI.
- Turabi, A. H. (1996). *el-Kindî'nin Müsikî Risâleleri*, İstanbul, 33; (1999), İbn Sinâ (Müsikî), *Diyanet İslam Ansiklopedisi*, v.20, İstanbul, 336; (1997), İlk Dönem İslam Dünyasında Müsikî Çalışmalarına Bakış, *Marmara Üniversitesi İlahiyat Fakültesi Dergisi*, v. XIII-XV, İstanbul, 237.
- Wright, O. (1994). 'Abd al-Qâdir Al-Marâğhî And 'Alî B. Muhammad Binâ'î: Two Fifteenth-Century Examples Of Notation. *Bulletin Of the School Of Oriental Studies, University Of London*, London, 475.